

Regional HIV/AIDS Epidemiologic Profile of Plymouth County, Massachusetts: 2011

Recent changes to the presentation of Massachusetts HIV/AIDS surveillance data

Effective January 1, 2011, the Massachusetts Department of Public Health (MDPH), Bureau of Infectious Diseases, HIV/AIDS fact sheets, epidemiologic reports and other HIV data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed while residing in another state before being reported in Massachusetts. As of January 1, 2011, this resulted in the removal of 2,297 HIV/AIDS cases, of which 739 have died and 1,558 were living. These persons living with HIV/AIDS may currently reside and receive care in the Commonwealth. The total number of persons living in Massachusetts with HIV/AIDS, irrespective of location of diagnosis, is the basis for MDPH service planning. This change is partially a result of increased activities required by the Centers for Disease Control and Prevention (CDC) for de-duplication among states in an effort to identify cases that are counted multiple times in the National HIV/AIDS surveillance system. The cases are assigned to the state that reports the earliest date of AIDS diagnosis, if available. If the case has not progressed to AIDS, the case is assigned to the state with the earliest HIV diagnosis date. Please note that all previous HIV/AIDS fact sheets, data reports and presentations include cases that may have been first diagnosed in another state.

Also effective January 1, 2011, the Massachusetts Department of Public Health (MDPH) HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to eliminate the presumed heterosexual exposure mode category for males; those cases have been reassigned to the no identified risk (NIR) exposure mode category. The presumed heterosexual exposure mode category was used with the intention of identifying HIV exposure mode for females when sex with males is the only reported risk factor, there is no evidence of current or past injection drug use (IDU), and behavioral risk and HIV status information about male sexual partners are unknown. Twenty-nine percent of females living with HIV/AIDS and 41% of recent HIV diagnoses among females are reported in the presumed heterosexual exposure mode category. The application of the presumed heterosexual exposure mode category to males is overly inclusive in that female to male HIV transmission is biologically less probable, and there are alternate exposure modes that are possible for males, including sex with other men (MSM) or IDU. The CDC reports males diagnosed with HIV/AIDS who report sex with females as their only risk factor, without corresponding partner risk or HIV status information, in the NIR exposure mode category. This revision to report presumed heterosexual male HIV/AIDS cases as NIR will bring Massachusetts HIV/AIDS case reporting for males in alignment with CDC standards. The MDPH will maintain presumed heterosexual and heterosexual exposure mode categories for females.

Table 1. Total number of people reported with HIV infection or AIDS¹ by mortality status on December 31, 2010: Plymouth County, Massachusetts²

	N	%
People Living with HIV/AIDS	667	57%
People Reported with HIV or AIDS who are Deceased	510	43%
Total Number of People Reported with HIV Infection or AIDS	1,177	100%

¹ Does not include individuals diagnosed with HIV infection (non-AIDS) who died prior to January 1, 1999 or who were not in care on January 1, 1999

² Effective, January 1, 2011 the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

Data Source: MDPH HIV/AIDS Surveillance Program, Data as of 1/1/11

Table 2. Average annual rate of HIV infection diagnosis from 2007 to 2009 and HIV/AIDS prevalence rate on 12/31/10¹: Plymouth County, Massachusetts²

Average annual HIV diagnosis rate from 2007–2009	Average rate per 100,000	Average annual number of HIV diagnoses
Plymouth County, MA	5.8	28.7
Massachusetts Total	9.4	607.3

HIV/AIDS prevalence rate on 12/31/10	Rate per 100,000	Number of people living with HIV/AIDS
Plymouth County, MA	134.0	667
Massachusetts Total	273.7	17,621

¹ The denominators for prevalence calculations are based on year 2005 population estimates from the MDPH Bureau of Health Statistics, Research and Evaluation.

² Effective, January 1, 2011 the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

Data Source: MDPH HIV/AIDS Surveillance Program, Data as of 1/1/11

Table 3. People living with HIV/AIDS¹, deaths among people reported with HIV/AIDS, and newly diagnosed HIV infections by year²: 2000–2009, Plymouth County, Massachusetts³

Year	HIV/AIDS Prevalence	Deaths among those with HIV/AIDS	Diagnosis of HIV Infection
2000	458	13	46
2001	496	17	55
2002	532	15	51
2003	547	20	35
2004	565	17	35
2005	580	18	33
2006	600	14	34
2007	617	12	29
2008	633	13	29
2009	654	7	28

¹ Number of people living with HIV/AIDS on 12/31 of each year

² Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available 10 year period after the implementation of HIV infection reporting in 1999.

³ Effective, January 1, 2011 the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

Data source: MDPH HIV/AIDS Surveillance Program, Data as of 1/1/11

Table 4. People diagnosed with HIV infection from 2007–2009¹ and people living with HIV/AIDS on December 31, 2010 by gender, place of birth, race/ethnicity, exposure mode, age at HIV infection diagnosis and current age: Plymouth County, Massachusetts²

HIV Infection Diagnoses			PLWH/A	
Gender:	N	%	N	%
Male	56	65%	441	66%
Female	30	35%	226	34%
Place of Birth:	N	%	N	%
US	37	43%	441	66%
Puerto Rico/US Dependency ³	-- ⁷	-- ⁷	34	5%
Non-US	-- ⁷	-- ⁷	192	29%
Race/Ethnicity:	N	%	N	%
White (non-Hispanic)	24	28%	307	46%
Black (non-Hispanic)	47	55%	256	38%
Hispanic/Latino	-- ⁷	-- ⁷	92	14%
Other/Undetermined ⁴	-- ⁷	-- ⁷	12	2%
Exposure Mode:	N	%	N	%
Male-to-male sex (MSM)	22	26%	177	27%
Injection Drug Use (IDU)	-- ⁷	-- ⁷	130	19%
MSM/IDU	-- ⁷	-- ⁷	16	2%
Heterosexual Sex	14	16%	104	16%
Other	0	0%	28	4%
Total Undetermined	42	49%	212	32%
• Presumed Heterosexual Sex ⁵	14	16%	79	12%
• Undetermined ⁶	28	33%	133	20%
Age:	N	%	N	%
	At Diagnosis		On December 31, 2010	
Under 13	0	0%	4	1%
13 to 19	-- ⁷	-- ⁷	9	1%
20 to 24	8	9%	14	2%
25 to 29	7	8%	22	3%
30 to 34	8	9%	43	6%
35 to 39	7	8%	54	8%
40 to 44	16	19%	110	16%
45 to 49	15	17%	144	22%
50 to 54	12	14%	128	19%
55 to 59	8	9%	80	12%
60+	-- ⁷	-- ⁷	59	9%
Total	86	100%	667	100%

¹ Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available three-year period after the implementation of HIV infection reporting in 1999.

² Effective, January 1, 2011 the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

³ Ninety-seven percent of all people diagnosed with HIV infection in MA who were born in a US dependency were born in Puerto Rico, 1% were born in the US Virgin Islands, <1% were born in American Samoa, <1% were born in Guam and 3% were born in an unknown dependency.

⁴ Other/Undetermined includes Asian/Pacific Islander, American Indian/Alaska Native and people of unspecified race/ethnicity

⁵ Includes female sex with male of unknown HIV status or risk. This category is limited to females.

⁶ Includes male sex with female of unknown HIV status or risk, those still being followed up for risk information, those who have died with no determined risk, and those lost to follow-up.

⁷ Numbers less than 5 for localities with populations of less than 50,000 are suppressed for the assurance of confidentiality.

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), Data as of 1/1/11

Table 5. People living with HIV/AIDS on December 31, 2010 by gender and race/ethnicity: Plymouth County, Massachusetts¹

Race/Ethnicity:	Male		Female	
	N	%	N	%
White (non-Hispanic)	235	53%	72	32%
Black (non-Hispanic)	136	31%	120	53%
Hispanic/Latino	63	14%	29	13%
Other/Undetermined ²	7	2%	5	2%
Total	441	100%	226	100%

¹ Effective, January 1, 2011 the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

² Other/Undetermined includes Asian/Pacific Islander, American Indian/Alaska Native and people of unspecified race/ethnicity.

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), data as of 1/1/11

Table 6. People living with HIV/AIDS on December 31, 2010 by gender and exposure mode: Plymouth County, Massachusetts¹

Exposure Mode:	Male		Female	
	N	%	N	%
Male-to-male sex (MSM)	177	40%	N/A	N/A
Injection drug use (IDU)	86	20%	44	19%
MSM/IDU	16	4%	N/A	N/A
Heterosexual sex	30	7%	74	33%
Other	17	4%	11	5%
Total Undetermined	115	26%	97	43%
• Presumed heterosexual sex ²	N/A	N/A	79	35%
• Undetermined ³	115	26%	18	8%
Total	441	100%	226	100%

¹ Effective, January 1, 2011 the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

² Includes female sex with male of unknown HIV status or risk. This category is limited to females.

³ Includes male sex with female of unknown HIV status or risk, those still being followed up for risk information, those who have died with no determined risk, and those lost to follow-up.

N/A=Not Applicable

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), data as of 1/1/11

Table 7. People diagnosed with HIV infection by gender and year of diagnosis: Plymouth County, Massachusetts¹, 2000–2009²

	Male		Female		Total
	N	%	N	%	
2000	29	63%	17	37%	46
2001	30	55%	25	45%	55
2002	38	75%	13	25%	51
2003	16	46%	19	54%	35
2004	21	60%	14	40%	35
2005	21	64%	12	36%	33
2006	19	56%	15	44%	34
2007	21	72%	8	28%	29
2008	18	62%	11	38%	29
2009	17	61%	11	39%	28

¹ Effective, January 1, 2011 the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

² Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available 10 year period after the implementation of HIV infection reporting in 1999.

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), data as of 1/1/11

Table 8. People diagnosed with HIV infection by race/ethnicity and year of diagnosis: Plymouth County, Massachusetts¹, 2000–2009²

	White NH		Black NH		Hispanic/Latino		Other/ Undetermined ³		Total
	N	%	N	%	N	%	N	%	
2000	21	46%	20	43%	-- ⁴	-- ⁴	-- ⁴	-- ⁴	46
2001	24	44%	26	47%	5	9%	0	0%	55
2002	22	43%	18	35%	10	20%	-- ⁴	-- ⁴	51
2003	15	43%	17	49%	-- ⁴	-- ⁴	-- ⁴	-- ⁴	35
2004	18	51%	11	31%	6	17%	0	0%	35
2005	12	36%	16	48%	5	15%	0	0%	33
2006	13	38%	13	38%	-- ⁴	-- ⁴	-- ⁴	-- ⁴	34
2007	10	34%	12	41%	7	24%	0	0%	29
2008	6	21%	21	72%	-- ⁴	-- ⁴	-- ⁴	-- ⁴	29
2009	8	29%	14	50%	-- ⁴	-- ⁴	-- ⁴	-- ⁴	28

¹ Effective, January 1, 2011 the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

² Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available 10 year period after the implementation of HIV infection reporting in 1999.

³ Other/Undetermined includes Asian/Pacific Islander, American Indian/Alaska Native and people of unspecified race/ethnicity.

⁴ Numbers less than 5 for localities with populations of less than 50,000 are suppressed for the assurance of confidentiality.

NH = Non-Hispanic

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), data as of 1/1/11

Table 9. People diagnosed with HIV infection by place of birth and year of diagnosis: Plymouth County, Massachusetts¹, 2000–2009²

	US		Puerto Rico/ US Dependency ³		Non-US		Total
	N	%	N	%	N	%	
2000	29	63%	-- ⁴	-- ⁴	-- ⁴	-- ⁴	46
2001	31	56%	-- ⁴	-- ⁴	-- ⁴	-- ⁴	55
2002	32	63%	5	10%	14	27%	51
2003	22	63%	-- ⁴	-- ⁴	-- ⁴	-- ⁴	35
2004	23	66%	-- ⁴	-- ⁴	-- ⁴	-- ⁴	35
2005	18	55%	5	15%	10	30%	33
2006	21	62%	0	0%	13	38%	34
2007	10	34%	-- ⁴	-- ⁴	-- ⁴	-- ⁴	29
2008	15	52%	0	0%	14	48%	29
2009	12	43%	0	0%	16	57%	28

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² Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available 10 year period after the implementation of HIV infection reporting in 1999.

³ Ninety-seven percent of all people diagnosed with HIV infection in MA who were born in a US dependency were born in Puerto Rico, 1% were born in the US Virgin Islands, <1% were born in American Samoa, <1% were born in Guam and 3% were born in an unknown dependency.

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Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), data as of 1/1/11

Table 10. People diagnosed with HIV infection by exposure mode and year of diagnosis: Plymouth County, Massachusetts¹, 2000–2009²

	MSM		IDU		MSM/ IDU		HTSX		Other		Pres. HTSX ³		Undeter- mined ⁴		Total
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N
2000	9	20%	14	30%	0	0%	8	17%	0	0%	7	15%	8	17%	46
2001	8	15%	9	16%	-- ⁵	-- ⁵	10	18%	-- ⁵	-- ⁵	9	16%	17	31%	55
2002	15	29%	9	18%	-- ⁵	-- ⁵	7	14%	-- ⁵	-- ⁵	6	12%	13	25%	51
2003	9	26%	5	14%	0	0%	-- ⁵	-- ⁵	-- ⁵	-- ⁵	10	29%	7	20%	35
2004	11	31%	-- ⁵	-- ⁵	0	0%	-- ⁵	-- ⁵	-- ⁵	-- ⁵	7	20%	9	26%	35
2005	7	21%	5	15%	0	0%	-- ⁵	-- ⁵	-- ⁵	-- ⁵	5	15%	11	33%	33
2006	12	35%	-- ⁵	-- ⁵	0	0%	-- ⁵	-- ⁵	-- ⁵	-- ⁵	9	26%	5	15%	34
2007	9	31%	-- ⁵	-- ⁵	-- ⁵	-- ⁵	-- ⁵	-- ⁵	0	0%	-- ⁵	-- ⁵	10	34%	29
2008	8	28%	-- ⁵	-- ⁵	-- ⁵	-- ⁵	6	21%	0	0%	-- ⁵	-- ⁵	9	31%	29
2009	5	18%	0	0%	-- ⁵	-- ⁵	-- ⁵	-- ⁵	0	0%	8	29%	9	32%	28

¹ Effective, January 1, 2011 the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

² Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available 10 year period after the implementation of HIV infection reporting in 1999.

³ Includes female sex with male of unknown HIV status or risk. This category is limited to females.

⁴ Includes male sex with female of unknown HIV status or risk, those still being followed up for risk information, those who have died with no determined risk, and those lost to follow-up.

⁵ Numbers less than 5 for localities with populations of less than 50,000 are suppressed for the assurance of confidentiality.

MSM = Male-to-Male Sex; IDU = Injection Drug Use; MSM/IDU = Male-to-Male Sex and Injection Drug Use; HTSX = Heterosexual Sex; Pres. HTSX = Presumed Heterosexual Sex

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), data as of 1/1/11

Table 11. People diagnosed with HIV infection and AIDS within two months and all people diagnosed with HIV infection by year of diagnosis: Plymouth County, Massachusetts¹, 2000–2009²

	HIV and AIDS diagnosed within two months	All HIV infection diagnoses	% diagnosed with HIV and AIDS within two months
Year:	N	N	%
2000	15	46	33%
2001	26	55	47%
2002	24	51	47%
2003	11	35	31%
2004	15	35	43%
2005	12	33	36%
2006	18	34	53%
2007	10	29	34%
2008	9	29	31%
2009	8	28	29%

¹ Effective, January 1, 2011 the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

² Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available ten-year period after the implementation of HIV infection reporting in 1999.

Data Source: MDPH HIV/AIDS Surveillance Program, data as of 1/1/11

Table 12. People diagnosed with HIV infection and AIDS within two months and all people diagnosed with HIV infection by gender, race/ethnicity, and place of birth: Plymouth County, Massachusetts,¹ 2007–2009²

	HIV and AIDS diagnosed within two months	All HIV infection diagnoses	% diagnosed with HIV and AIDS within two months
Gender:	N	N	%
Male	16	56	29%
Female	11	30	37%
Race/Ethnicity:	N	N	%
White (non-Hispanic)	-- ⁵	-- ⁵	-- ⁵
Black (non-Hispanic)	15	47	32%
Hispanic/Latino	6	12	50%
Other/Undetermined ³	-- ⁵	-- ⁵	-- ⁵
Place of Birth:	N	N	%
US	-- ⁵	-- ⁵	-- ⁵
Puerto Rico/US Dependencies ⁴	-- ⁵	-- ⁵	-- ⁵
Non-US	19	47	40%
Total	27	86	31%

¹ Effective, January 1, 2011 the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

² Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available three-year period after the implementation of HIV infection reporting in 1999.

³ Other/Undetermined includes Asian/Pacific Islander, American Indian/Alaska Native and people of unspecified race/ethnicity.

⁴ Ninety-nine percent of people diagnosed with HIV infection from 2007–2009 who were born in a US dependency were born in Puerto Rico, <1% were born in the US Virgin Islands and <1% were born in Guam.

⁵ Numbers less than 5 for localities with populations of less than 50,000 are suppressed for the assurance of confidentiality.

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), data as of 1/1/11